

Abstract

Displays such as liquid crystal displays (10), organic light emitting diode displays, and touch sensitive displays (41) are stacked with one or more solar cells (15) such that light passing through the displays will illuminate the light receiving active surface of the solar cells (15). No reflector or polarizer need be used when the liquid crystal display (10) uses cholesteric or polymer dispersed liquid crystals. When using supertwist nematic or twisted nematic liquid crystals, a reflector (21) can be used that comprises a selective color reflector. The resultant display/solar cell can be utilized in combination with a device such as a wireless communications device (62) with the solar cell (15) providing electricity to the display (61), the wireless communications device (62), or both. A mask (71) can be used to occlude surface features on the solar cell (15) as appropriate to provide a substantially uniformly colored appearance.